Veterinary Technology (VET_TCH)

VET_TCH 1010: Biomedical Career Explorations
(same as BIOMED 1010). An introduction to the variety of career possibilities within the growing field of biomedical sciences. Graded on A-F basis only.

Credit Hour: 1
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

VET_TCH 2085: Problems in Veterinary Biomedical Research
(same as BIOMED 2085). The course is intended to provide an opportunity for undergraduate students to have guided experience in laboratory and clinical settings. Graded on A-F basis only.

Credit Hour: 1
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

VET_TCH 2230: Farm Animal Sanitation and Disease Prevention
(same as BIOMED 2230). Preventative measures for diseases and parasites of farm animals. Graded on A-F basis only.

Credit Hours: 3
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

VET_TCH 3000: Specialty Careers for Veterinary Technicians
(same as BIOMED 3000). Specialty careers for veterinary technicians are jobs which required knowledge and skills beyond those needed in primary care clinical veterinary practice. This course will explore veterinary technician specialties, the education required, and the advantages of advanced academic training. Graded on A-F basis only.

Credit Hour: 1
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

VET_TCH 3001: Topics in Veterinary Technology
This is a temporary course numbering to host a course that is necessary for the BS in Veterinary Technology curriculum but has not completed the academic approval process. This course content is appropriate for students with junior standing by credit hours. Graded on A-F basis only.

Credit Hour: 1-4
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

VET_TCH 3100: Biomedical Pathophysiology
(same as BIOMED 3100). Pathophysiology is the study of changes in the body resulting from disease. Prior coursework in normal anatomy and physiology is required. This course has been developed for veterinary technicians. Both animal and human examples of disease are covered. Graded on A-F basis only.

Credit Hours: 3
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

VET_TCH 3110: Small Animal Dentistry
The course builds upon concepts and skills for a small animal COHAT (Comprehensive Oral Health Assessment and Treatment) and will emphasize evaluation of the animal's dental health status, recognition, prevention and client education regarding common oral conditions and diseases. Graded on A-F basis only.

Credit Hours: 3
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

VET_TCH 3219: Elements of Comparative Anatomy
(same as BIOMED 3219). This course is designed to give students an appreciation for comparative anatomy of various species encountered in veterinary technology and veterinary medicine. Detailed and labeled photos of dissected specimens are used to aid instruction. Graddd on A-F basis only.

Credit Hours: 3
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

VET_TCH 3250: Veterinary Clinical Parasitology
(same as BIOMED 3250). Parasitism is considered a fundamental type of interspecies interaction. Identifying characteristics, life cycle, and resulting disease caused by the common parasites of domestic animals, common laboratory animals, and selected wildlife are described. Special emphasis is given to laboratory diagnosis and prevention and control of common parasites of domestic and companion animals. Graded on A-F basis only.

Credit Hours: 3
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

VET_TCH 3300: Animal Welfare and Ethics
(same as BIOMED 3300). An introductory examination of ethical issues related to animal welfare, including animal use for food, research, and companionship, plus contemporary issues affecting companion animals,

farm animals, and horses. Topics related to animal pain and legal status will also be discussed. Graded on A-F basis only.

Credit Hours: 3
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

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VET_TCH 3326: Veterinary Pharmacology
(same as BIOMED 3326). Review and clinical application of basic veterinary pharmacology. Topics to be covered include terminology, calculations, physiology, and pharmacokinetics and pharmacodynamics. Both small and large animal organ systems are discussed. Medicolegal aspects of veterinary pharmacology are also reviewed. Graded on A-F basis only.

Credit Hours: 3
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

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VET_TCH 3400: Domestic Animal Behavior in Veterinary Practice
(same as BIOMED 3400). Students will be introduced to the key characteristics of behavior among common domestic animals such as dogs, pigs, cats, horses, cattle, sheep and goats. Topics include communication, aggression, biological rhythms, reproductive behavior, learning and development, ingestive behavior and genetics. This course will enable students to gain a thorough understanding of assessing animal behavior, as well as how to utilize the assessment to better the animal's health. Graded on A-F basis only.

Credit Hours: 2
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

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VET_TCH 3450: General Veterinary Anesthesia
This course is intended to be an introduction to concepts of veterinary anesthesia of all domestic species. Topics include: drugs used for premedication, induction and maintenance of general anesthesia in the domestic species; equipment, including inhalation anesthetic machines, ventilators and monitoring equipment. Anesthetic considerations for patients with specific problems such as cardiac diseases and pregnancy will also be included. Graded on A-F basis only.

Credit Hours: 2
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

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VET_TCH 3455: Veterinary Nursing for Lab Animals and Research
Students will improve their knowledge base in laboratory animal husbandry, health and welfare, as well as laboratory facility administration and management. Emphasis will be placed on proper sanitation and facility procedures in coordination with all local, federal and state mandated laws. Students will also gain an understanding of the appropriate regulatory resources available to them. Graded on A-F basis only.

Credit Hours: 3
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

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VET_TCH 4001: Topics in Veterinary Technology
This is a temporary course numbering to host a course that is necessary for the BS in Veterinary Technology curriculum but has not completed the academic approval process. This course content is appropriate for students with senior standing by credit hours. Graded on A-F basis only.

Credit Hour: 1-4
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

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VET_TCH 4105: Veterinary Hematology and Clinical Chemistry
(same as BIOMED 4105; cross-leveled with 7105). This course is for students who wish to develop and enhance their skills in hematology and clinical chemistry. Normal morphology and the function of the hematopoietic system are reviewed, as well as their response during different disease processes. Fundamentals of veterinary diagnostic cytology are also introduced, while a comprehensive overview of clinical biochemistry in domestic animals organized by organ system is presented. Additionally, sections covering hematology and clinical biochemistry of non-domestic mammals, birds, reptiles, fish, and amphibians are included. Graded on A-F only.

Credit Hours: 3
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

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VET_TCH 4110: Veterinary Cytology
(same as BIOMED 4110; cross-leveled with PIBS 7110). This course of Veterinary Cytology is designed to hone the skills of the practicing veterinary technician, and assumes some basic knowledge of microscope usage and normal hematology. The review of normal cells will be minimal and emphasis will be placed on findings associated with inflammatory and neoplastic diseases. The graduate level course will include discussion of ancillary tests, special stains and treatment alternatives. The focus will be on canine and feline diseases but some common equine and bovine disease. Graded on A-F basis only.

Credit Hours: 2
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

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VET_TCH 4120: Principles of Toxicology
(same as BIOMED 4120). This course will provide an introduction to the general principles of toxicology, including the history and scope of the field; risk assessment and management; mechanisms of toxicity; the disposition of toxicants, non-target organ-directed toxicity; toxic

responses of specific target organs/systems; an overview of a number of specific classes of toxic agents, including pesticides and metals; and various toxicological applications, such as environmental, forensic, and occupational toxicology. Graded on A-F basis only.

Credit Hours: 3
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

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VET_TCH 4200: Small Animal Cardiology for Veterinary Technicians
This course offers a comprehensive exploration of cardiovascular anatomy, physiology, pathology, diagnostics, and therapeutics specific to small animal patients within the veterinary technology field. Through a blend of reading, video lecture, and clinical case studies, students will develop a deeper understanding of the principles and practices essential for nursing care of cardiac conditions in small animals. Topics covered include cardiac anatomy and function, electrocardiography, echocardiography, diagnostic imaging, pharmacology, and nursing care of cardiac patients. Graded on A-F basis only.

Credit Hours: 2
Prerequisites: Acceptance into the BS in Veterinary Technology Program

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VET_TCH 4205: Small Animal Endocrinology for Veterinary Technicians
This course will provide valuable knowledge and skills for veterinary professionals to improve their understanding of diagnosis and treatment for small animal endocrine diseases. With a greater understanding of these common, naturally occurring diseases, veterinary technicians can fully engage in patient care through correctly performing diagnostic testing and recognizing how to monitor short- and long term response to treatment. Graded on A-F basis only.

Credit Hours: 2
Prerequisites: Admission to BSVT program, completion of an associate's degree in veterinary technology or instructor's consent required

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VET_TCH 4210: Animal Issues in Disasters
(same as BIOMED 4210; cross-leveled with PIBS 7210). Course provides a broad overview of the complex issues that arise when animals are present within a disaster impact area. The course includes information about the legal requirements for animal disaster response, how the existence of the human-animal bond influences human behavior during a disaster, and the common animal welfare and public health issues that arise during disasters. Students will use current information about disaster preparedness at pertinent websites to prepare individual emergency response plans for their families and animals. Additionally, students will complete 5 FEMA certifications associated with disaster response of animals. Finally, students will analyze appropriate literature to improve their preparedness for and response to a future disaster.

Credit Hours: 3
Prerequisites: Admission to the BSVT program

VET_TCH 4250: Human-Animal Bond in Veterinary Practice
(same as BIOMED 4250; cross-leveled with BIOMED 7250). Exploration of historical & theoretical bases of human-companion animal interaction (HAI), the nature, issues, & clinical applications of human/animal interaction in veterinary practice. Graded on A-F basis only.

Credit Hours: 3
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

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VET_TCH 4300: Clinical Veterinary Neurology
(same as BIOMED 4300). This course in clinical veterinary neurology will review the neurologic examination, common neurologic diseases and techniques to properly care for the neurologic patient. The course organization is based primarily on neuroanatomic localization of disease. Graded on A-F basis only.

Credit Hours: 3
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

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VET_TCH 4320: Small Animal Emergency and Critical Care
(same as BIOMED 4320; cross-leveled with V_M_S 7320). This course will provide students with the knowledge and skills to assist in small animal medical emergency and critical care facilities. Graded on A-F basis only.

Credit Hours: 3
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

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VET_TCH 4333: Veterinary Cell Biology
(same as BIOMED 4333; cross-leveled with PIBS 7333). Course material stresses cell biology as related to animal health and medical issues. A comprehensive course overviewing molecular and biochemical issues of cell function especially as related to medicine and the underlying molecular causes of disease. Graded on A-F basis only.

Credit Hours: 4
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

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VET_TCH 4400: Veterinary Surgical Nursing
(same as BIOMED 4400). Veterinary Surgical Nursing will enable the student to properly identify, care for, and maintain surgical equipment. The course will also prepare the student to learn surgical anatomy as will as the potential complications of common clinical setting surgeries. Graded on A-F basis only.

Credit Hours: 3
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

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VET_TCH 4410: Small Animal Physical Rehabilitation
(same as BIOMED 4410). Small Animal Physical Rehabilitation will review the science of veterinary rehabilitation, assessment of the rehabilitation patient and the techniques used to treat these patients. The organization of the course is based upon rehabilitation modalities and the patient's diagnosis. Graded on A-F basis only.

Credit Hours: 3
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

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VET_TCH 4420: Canine and Feline Nutrition
(same as BIOMED 4420). This course begins with a brief review of nutrition basics. The following units include the nutrient requirements for dogs and cats; history, regulation and evaluation of pet foods; feeding management throughout the life cycle, and treatment of nutritionally responsive disorders. Graded on A-F basis only.

Credit Hours: 3
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

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VET_TCH 4451: Small Animal Anesthesia
The course is intended to build on general anesthesia concepts and is specific to small companion animals. Topics covered include equipment and drugs used for premedication, induction and maintenance of general anesthesia in the small animal domestic species. Anesthetic considerations for patients with specific problems such as cardiac diseases and pregnancy will also be included. Graded on A-F basis only.

Credit Hour: 1
Prerequisites or Corequisites: VET_TCH 3450
Prerequisites: Restricted to students in the BS in Veterinary Technology program

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VET_TCH 4452: Large Animal Anesthesia
The course is intended to build on general anesthesia concepts and be species specific for large animals. Topics covered include drugs used for premedication, induction, and maintenance of general anesthesia in the large animal species. Equipment will also be discussed including inhalation anesthetic machines, and monitoring equipment. Anesthetic considerations for patients with specific problems such as cardiac diseases and pregnancy will also be included. Graded on A-F basis only.

Credit Hour: 1
Prerequisites or Corequisites: VET_TCH 3450
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

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VET_TCH 4500: Equine Critical Care and Nursing
(same as BIOMED 4500). This course provides advanced information for veterinary technicians wishing to enhance and focus their understanding of equine critical care and nursing concepts. Graded on A-F basis only.

Credit Hours: 3
Prerequisites: Restricted to students in the BS in Veterinary Technology Program

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VET_TCH 4590: Small Animal Practice for Veterinary Technicians
This course offers an in-depth exploration of small animal general practice, designed specifically for veterinary technicians. Focusing on the comprehensive care of dogs and cats from pediatric through geriatric stages, students will acquire practical knowledge in various critical aspects of veterinary care. The curriculum covers nutrition, behavior and training, vaccinology, parasitology, preventative care, infectious diseases, dermatology, and end-of-life care. By engaging in lectures, interactive discussions, and case studies, students will develop a thorough understanding of small animal care. This course is designed to equip students with the skills and knowledge necessary for maintaining a successful and fulfilling career in veterinary practice.

Credit Hours: 2
Prerequisites: Acceptance into BSVT program

VET_TCH 4600W: Leadership and Communication for Veterinary Technicians - Writing Intensive
This writing intensive course challenges students to use critical thinking strategies to study the leadership and coordinating role of the professional veterinary technician within patient care delivery, client communication, the business of a veterinary hospital and the future of the profession. Current theories of management, leadership and change are examined and related to veterinary technicians in practice today. Focus placed on synthesis of knowledge to develop innovative and creative approaches to the responsibilities of a veterinary technician using both written and oral forms of communication. Applies theoretical and empirical concepts of leadership and promotes effective interprofessional communication with all members of the public and veterinary team. Graded on A-F basis only.

Credit Hours: 3
Prerequisites: Restricted to students in the BS in Veterinary Technology Program; ENGLSH 1000, Student should be currently enrolled in final 3 semesters of program

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VET_TCH 4670: Veterinary Business and Practice Management Skills
This course will provide students with the practice management expertise necessary to become a valuable member of the veterinary team. The course will be divided into two sections, with the first section focusing on the veterinary practice team environment and overall development. The second section will cover the basics of veterinary operations. Topics include team member roles, human resources, ethics, professional

development, employee mental health, marketing, finance, customer service, practice management software (appointments, medical records, and inventory), controlled substances, safety, and calculations. The material covered in this course will allow the students to utilize these office management skills in any type of veterinary practice setting. Graded on A-F basis only.

Credit Hours: 3
Prerequisites: Restricted to students in the BS in Veterinary Technology Program. ENGLSH 1000